

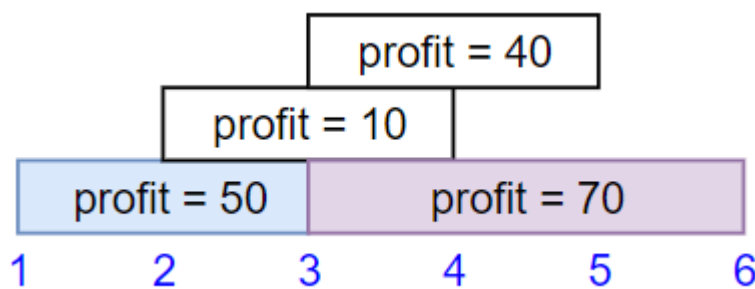
## Maximum Profit in Job Scheduling [\(View\)](#)

We have  $n$  jobs, where every job is scheduled to be done from  $startTime[i]$  to  $endTime[i]$ , obtaining a profit of  $profit[i]$ .

You're given the  $startTime$ ,  $endTime$  and  $profit$  arrays, return the maximum profit you can take such that there are no two jobs in the subset with overlapping time range.

If you choose a job that ends at time  $x$  you will be able to start another job that starts at time  $x$ .

### Example 1:



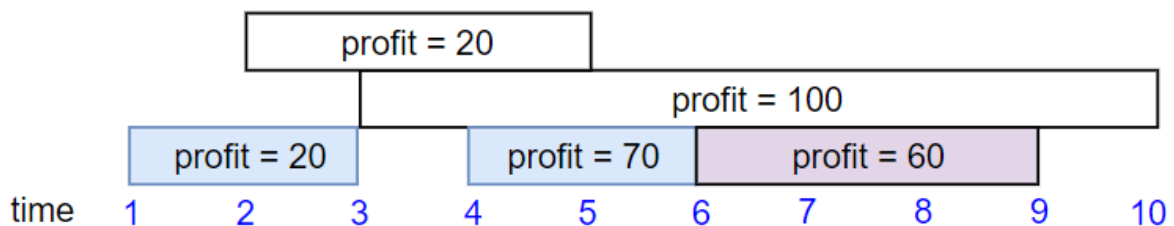
**Input:**  $startTime = [1, 2, 3, 3]$ ,  $endTime = [3, 4, 5, 6]$ ,  $profit = [50, 10, 40, 70]$

**Output:** 120

**Explanation:** The subset chosen is the first and fourth job.

Time range  $[1-3] + [3-6]$ , we get profit of  $120 = 50 + 70$ .

### Example 2:



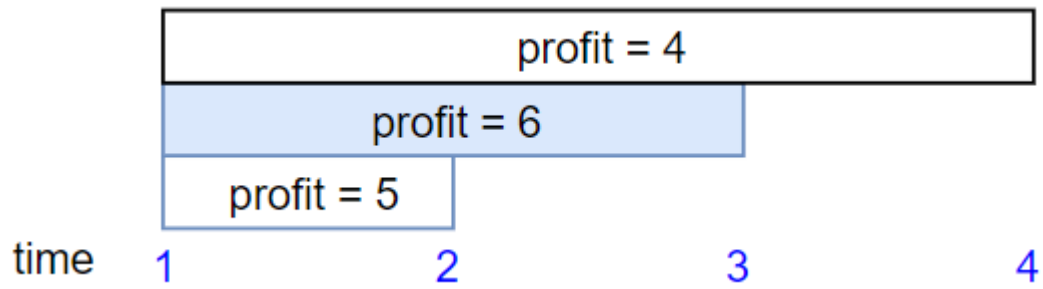
**Input:**  $startTime = [1, 2, 3, 4, 6]$ ,  $endTime = [3, 5, 10, 6, 9]$ ,  $profit = [20, 20, 100, 70, 60]$

**Output:** 150

**Explanation:** The subset chosen is the first, fourth and fifth job.

Profit obtained  $150 = 20 + 70 + 60$ .

**Example 3:**



Input: startTime = [1,1,1], endTime = [2,3,4], profit = [5,6,4]

Output: 6

**Constraints:**

- $1 \leq \text{startTime.length} == \text{endTime.length} == \text{profit.length} \leq 5 \cdot 10^4$
- $1 \leq \text{startTime}[i] < \text{endTime}[i] \leq 10^9$
- $1 \leq \text{profit}[i] \leq 10^4$